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(57) **Abstract:** Novel nonlinear optical materials are described having the general formula $5 M_x M'_y Sc_z (BO_3)_4$ where M and M' are metals, typically rare earth metals, and the sum of x, y, and z is about four. One example of such a material is $La_{0.7}Y_{0.3}Sc_3(BO_3)_4$. Exemplary crystalline materials according to the general formula exhibit useful optical characteristics and desirable physical properties for nonlinear optical applications. Novel compositions and devices using the nonlinear optical materials also are described.



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